AMSAT News Service Weekly Bulletins
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AMSAT NEWS SERVICE
ANS-290

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-290.01
ARISSat-1 Info Added to AMSAT Web

AMSAT News Service Bulletin 290.01
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.01

Thanks to the ARISSat-1 team for providing a copy of their Symposium presentation materials. Links to the following have been posted at http://www.amsat.org.

1. ARISSat-1 color frequency guide
2. PDF copy of ARISSat-1 Overview presentation slides (~1MB)

Lots more information will be published in the AMSAT Journal.

ARISSat-1 will have these features ...

Transponder
. Mode U/V (70 cm Up, 2m Down)
. Linear
. Inverting (Tx LSB, Rx USB)
. 16 kHz bandwidth
. Can be worked with QRP transmitter and omni antennas

Digital Beacon
. BPSK-1000 w/FEC by Phil Karn KA9Q
. Legacy mode 400 BPSK (P3 type)
. Telemetry Data
. Experiment Data
. PC/Mac demodulator & decoder software will be available

CW Beacon
. Call sign [illegible]S01S
. CW Telemetry (subset)
. Call signs or names of developers

. CW1 or CW2 identifies BPSK mode

FM Audio
. Call sign ØS01S
. Voice Telemetry (subset)
. SSTV in Robot-36 format
. Voice Greetings

Voice Greetings
. 24 different greetings
. Mostly children
. Special one from Yuri Gagarin
. Secret word
. 15 different languages
English Spanish Russian French
Italian Dutch Swedish Japanese
Chinese Catalan Bengali Portuguese
Hebrew Nepalese German

[ANS thanks the ARISSat-1 team for the above information]

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SB SAT @ AMSAT $ANS-290.02
2010 AMSAT Symposium Proceedings Added To Online Store

AMSAT News Service Bulletin 290.02
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
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The 2010 Symposium Proceedings have been added to the AMSAT Online Store.

Please be aware that it is heavy and shipping overseas will be expensive. Martha will add the shipping charges at time of mailing and notify you of the exact amount for postage.

http://www.amsat.org

Click on Online Store in the left margin

[ANS thanks Bruce, KK5DO, for the above information]

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SB SAT @ AMSAT $ANS-290.03
FUNCube Dongle Development Status

AMSAT News Service Bulletin 290.03
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.03

Howard Long, G6LVB, reports that he is enormously gratified by the large volume of interest shown the FUNcube Dongle over the past few weeks. With so much interest being shown, Howard took some time to provide an update about the development progress.

The FUNcube Dongle was originally designed to be an accessible way to be able to receive amateur satellites, most notably AMSAT-UK's forthcoming FUNcube cubesat (http://www.funcube.org.uk).

What does accessible mean? Essentially we mean both low cost and easy to setup. The original target market is, and remains, what Howard calls,

"the unconverted", those, particularly in education, who need a means of being able to practically introduce and demonstrate real space technology in a hands-on way.

When the work on FUNcube was distributed, Howard was given the task of coming up with the ground segment, and the result is the FUNcube Dongle.

As it's tuned out, the FUNcube Dongle has the added bonus that it's a VHF/UHF and low microwave equivalent to the well-known Softrock in an integrated plug and play package. The intention is to have two models, an entry-level frequency-restricted version targeted at the educational market, and a full blown Pro version that seems to piqued the interest of many radio amateurs, radio astronomers and short wave listeners.

In pr�cis, it includes an integrated front end filter, LNA, quatrature

LO, zero-IF quadrature downconverter, dual 16 bit ADC and USB soundcard.

In it's simplest of forms, it's SMA in, USB out. It's also compatible with pretty much any software that works for the Softrock, for example LinRad,Spectravue, M0KGK and Rocky.

The passband is 96kHz, tuneable from 64MHz to 1,700MHz. The tuning is via a USB HID interface meaning that as well as your favourite soundcard

SDR program, you'll need a little app supplied with the FUNcube Dongle to control the centre frequency or you'll end up only listening to Howard's favorite FM broadcast station ;-)

It's also compatible with XP, Vista , Windows 7 in 32 bit and Vista and Windows 7 in 64 bit. Initial testing on the Mac and Ubuntu 32 and 64 bit shows compatibility too, however the frequency control application for those platforms has not been written yet.

So, no USB drivers are required!

To keep people informed going forward, a blog has been established at: http://www.funcubedongle.com/.

Also there's a video of the first pre-production unit at: http://www.youtube.com/watch?v�zTBPLqal0

Projected availability of the first production batch of the Pro version is December 2010. Pricing is subject to assembly costs, but to give you indicative pricing we are working on an initial price of the Pro version to be circa USD150/GBP100.

[ANS thanks Howard, G6LVB, for the above information]

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SB SAT @ AMSAT $ANS-290.04
Gpredict 1.2 released

AMSAT News Service Bulletin 290.04
From AMSAT HQ SILVER SPRING, MD.
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To All RADIO AMATEURS
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Alex Csete, OZ9AEC, reports that after one year of development,
bug fixing and testing it was decided that it was time to make a
new release of Gpredict. This release features several new features
such as the re-written layout engine as well as lots of bug fixes.

The new layout engine allows any combination of views to be created
in a NxM grid, see an example screenshot:
http://picasaweb.google.com/lh/photo/eF3tizT-Xj-az6VcykUzaA

The sky at a glance widget has been improved to look nicer and to
be more interactive. Moving the mouse over a pass pops up an info
widget showing info about the pass. Clicking on the pass brungs up
the pass details dialog. See:
http://picasaweb.google.com/lh/photo/anU9WhY4_40Gk-WVCP7ZWw

The info pop-ups have also been added to the map view and the polar
video. Moving the mouse over a satellite will show the current position
of the satellite as well as time until next AOS or LOS. You can see a
demo video here:
http://www.youtube.com/watch?v=C4A6onbBg

The new release can be downloaded from:
https://sourceforge.net/projects/gpredict/files//Gpredict/1.2/
Currently only the source package is available. Binary packages for
Windows, Mac and various Linux distributions should become available
shortly.

Thanks to everyone who has contributed to this release!

[ANS thanks Alex, OZ9AEC, for the above information]

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SB SAT @ AMSAT $ANS-290.05
ARISS Status - 11 October 2010

AMSAT News Service Bulletin 290.05
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IRSEA Contact Successful
An Amateur Radio on the International Space Station (ARISS) contact
took place between IRSEA, a non-profit Institute of Research and
Education, in Bisceglie, Italy and Doug Wheelock, KF5BOC on the ISS
on Tuesday, October 5, via telebridge station K6DUE in Greenbelt,
Maryland. Michele Mallardi, IZ7EVR introduced the ARISS event with a
presentation to an audience of 100 students and visitors. Obscurations
from the ISS structure may have hindered the contact, allowing time
for five questions to be answered. The contact was part of a profes-
sional education program, "Promotion of the characteristics of the
Puglia region" which dealt with space communications, space life,
space achievements, advantage of space research, use of man-made
satellites and the International Space Station.

ARISSat-1 Safety Review this Week
The Johnson Space Center Payload Safety Review Panel will perform a
Phase 2 flight safety review of ARISSat-1 on the mornings of Wednesday
and Thursday, October 13 and 14 in Houston. Participation in the
review will include U.S. and Russian ARISSat team members as well as
RSC-Energia safety specialists.

Challenger Learning Center Opens Ham Station

On Monday October 4, a satellite ground station was opened at the Challenger Learning Center (CLC) in Oregon, Ohio. The station will pique students' interest in math and science and will allow the youth to contact the International Space Station. CLC will provide lesson plans and activities on amateur radio and will use the system during camps and workshops. The Toldeo Blade posted a story on the event. "Kids wired to learn to operate ham radios" may be found at: http://www.toledoblade.com/article/20101009/NEWS16/10080352

ARISS Facebook Page Status
Amateur Radio on the International Space Station (ARISS) has generated some interest since it launched its Facebook page at the end of August. To view, go to:
http://www.facebook.com/pages/Amateur-Radio-on-the-International-Space-Station/143541532324016

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS